



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/774,177	02/02/2001	Michel Droux	201975US3PCT	8607

22850 7590 12/28/2004

OBLON, SPIVAK, MCCLELLAND, MAIER & NEUSTADT, P.C.  
1940 DUKE STREET  
ALEXANDRIA, VA 22314

EXAMINER
----------

YAO, SAMCHUAN CUA

ART UNIT	PAPER NUMBER
----------	--------------

1733

DATE MAILED: 12/28/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	Application No. 09/774,177	Applicant(s) DROUX, MICHEL	
	Examiner Sam Chuan C. Yao	Art Unit 1733	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

- 1) ☒ Responsive to communication(s) filed on 02 November 2004.  
 2a) ☒ This action is FINAL. 2b) ☐ This action is non-final.  
 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

- 4) ☒ Claim(s) 17-25 is/are pending in the application.  
 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.  
 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.  
 6) ☒ Claim(s) 17-25 is/are rejected.  
 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.  
 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

- 9) ☐ The specification is objected to by the Examiner.  
 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
 Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
 Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).  
 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
 a) ☐ All b) ☐ Some \* c) ☐ None of:  
 1. ☐ Certified copies of the priority documents have been received.  
 2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.  
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

- |  |   |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)   | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                                   | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

**DETAILED ACTION**

***Claim Rejections - 35 USC § 102***

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

2. Claims 17-25 are rejected under 35 U.S.C. 102(b) as being anticipated by Bolen et al (US 3,936,558) for reasons of record set forth in numbered paragraph 7 in a prior office action dated 12-15-03.

***Claim Rejections - 35 USC § 103***

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. Claim 23 is rejected under 35 U.S.C. 103(a) as being unpatentable over Bolen et al (US 3,936,558) as applied to claim 22 above for reasons of record set forth in numbered paragraph 9 in a prior office action dated 12-15-03.

This alternative rejection is made in the event that, a binder in powder form and in liquid form recited in this claim distinguish over binder particles in a liquid dispersion medium taught by Bolen et al.

### ***Response to Arguments***

5. Applicant's arguments filed on 11-02-04 have been fully considered but they are not persuasive.

Counsel essentially made the following main argument: "...the Bolen et al reference clearly does not teach a mat comprising at least one second layer of at least one intact strand formed of filaments that are not opened, wherein the at least second layer is not subjected to a flow of fluid used to at least partly open at least one first layer.". It should emphasized first of all that, the claims as presently recited are directed to **product claims** and NOT directed to process claims. It is respectfully submitted that, "[e]ven though product-by process claims are limited by and defined by the process, determination of patentability is based on the product itself. The patentability of a product does not depend on its method of production." MPEP 2113. Moreover, it is now well settled, "If the product in the product by process claim is the same as or obvious from the product of the prior art, the claim is unpatentable even though the prior art product was made by a different process." In re Thorpe, 777 f.2d 695,698,227 USPQ 964 966 (Fed. Cir. 1985). Accordingly, "The Patent Office bears a lesser burden of proof in making out a case of prima facie obviousness for product-by-process claims because of their peculiar nature than when a product is claimed in the conventional fashion. In re Fessmann, 489 F2d 742, 744, 180 USPQ 324, 326 (CCPA 1974). Once the Examiner provides a rationale tending to show that the claimed product appears to be the same or similar to that of the prior art, **although produced by a**

**different process, the burden shifts to applicant to come forward with evidence establishing an unobvious difference between the claimed product and the prior art product.**” In re Marosi, 710 F.2d 798, 802,218 USPQ 289, 292 (Fed. Cir. 1983). In the present case, the recited claims such as independent claim 17 (regardless of how the recited mat is formed) only requires the mat to comprise a 1<sup>st</sup> layer of at least one strand formed of filaments that are partly opened and a 2<sup>nd</sup> layer of at least one intact strand formed of filaments that are not opened. As repeatedly noted in the prior office action, one in the art reading the Bolen et al patent as a whole would have reasonably recognized and understood that, Bolen et al envisions forming a multi-layered fibrous mat having at least one layer of opened strand formed of filaments and “*at least one intact strands formed of filaments which are held together within the strand that are not opened*” as evidence from the following passages:

- a) **“One of the layers** has filaments of the strands therein at least partially dispersed to form a mesh size which entraps binder particles therein which have a mesh size larger than the mesh size of the dispersed filament layer, ... a fibrous body having variable mesh sizes or characteristics by **selectively filamentizing strands** or a layer of strands already in place in a mat-like collection of strands ... The strands in **one of the layers** are opened to separate the filaments of the strands from each other and change the mesh size of that layer to mechanically entrap binder particles therein.” (emphasis and bold-face added; abstract);

- b) *"In situation where only a small amount of binder particles are desired in layers of the mat-like mass which **do not have dispersed filaments**, a number of different approaches could individually or in combination be used. Only binder particles of a size that would be entrapped by the dispersed filaments could be used. (emphasis bold-face added; col. 6 lines 58-63);*
- c) *"The liquid strand dispersing phase of the binder can serve at least three functions. ... third, it **can disperse the filaments of the strands in one of the layers of the mat-like mass**." (emphasis and bold-face added; col. 7 lines 33-34);*
- d) *"When the product must rapidly gain entrance to the central body portion of the mat through one of the surfaces, then it is preferred that **the bottom layer of strands are not filamentized** so that the matrix may be more easily admitted to the mat." (emphasis and bold-face added; col. 8 lines 2-15);*
- e) *"The purpose of the soaking section is to **break down any bonds or other forces that may be holding filaments together in strand form in the layer or layers that are to be filamentized**." (emphasis and bold-face added; col. 17 lines 64-68); and,*
- f) *"Whether **filamentized or not**, the bottom layer at least provides substantially more intersections to filter some binder out ..." (emphasis and bold-face added; col. 18 lines 64-67).*

As for Counsel's argument on page 7 that "... all layers of strands are subject to the binder and other fluids used during opening of the strands, regardless of

*whether the opening of any individual layer is subject to an opening to a different degree than any other layer.*", it should be noted that, the claims as presently recited use an open transitional phrase "*comprising*". Therefore, these claims do not preclude forming a mat, where a binder is applied to the "*at least one second layer*". In fact, claim 23 requires applying powdered binder to the at least one second layer. Moreover, it should further be noted that, the mat of the present invention (although not explicitly recited) are heated in an oven (21) (page 15 lines 35-38; figure 1). Just like the present invention, a mat of Bolen et al is also heated using an oven. It directly follows that, a resultant mat of Bolen et al is structurally indistinguishable from the claimed mat of the present invention.

### ***Conclusion***

6. It is suggested for Counsel to amend claim 23 line 4, by deleting either "the" or "said" from "the said".

7. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of


Art Unit: 1733

the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Sam Chuan C. Yao whose telephone number is (571) 272-1224. The examiner can normally be reached on Monday-Friday with second Friday off.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Blaine Copenheaver can be reached on (571) 272-1156. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

  
Sam Chuan C. Yao  
Primary Examiner  
Art Unit 1733

Scy  
12-23-04